

LEXSEE 357 F.3D 1270

**RICHARD RUIZ and FOUNDATION ANCHORING SYSTEMS, INC., Plaintiffs-  
Appellees, v. A.B. CHANCE COMPANY, Defendant-Appellant.**

03-1333

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

*357 F.3d 1270; 2004 U.S. App. LEXIS 1325; 69 U.S.P.Q.2D (BNA) 1686*

January 29, 2004, Decided

**PRIOR HISTORY:** [\*\*1] Appealed from: United States District Court for the Eastern District of Missouri. Judge Catherine D. Perry. *Ruiz v. A.B. Chance Co.*, 2003 U.S. Dist. LEXIS 24044 (E.D. Mo., Mar. 10, 2003)

**DISPOSITION:** Affirmed.**CASE SUMMARY:**

**PROCEDURAL POSTURE:** Appellee patent infringer sought a declaratory judgment against appellant patent holder that its system did not infringe the holder's patents. On appeal from a judgment in favor of the infringer, the case was remanded for a further examination of obviousness. On remand, the United States District Court for the Eastern District of Missouri again found the relevant claims invalid as obvious under 35 U.S.C.S. § 103. The holder sought review.

**OVERVIEW:** The holder obtained a patent for a screw anchor system for use in supporting and stabilizing slumping structures. The infringer marketed an underpinning system with screw anchors and metal brackets that used components from other manufacturers besides the holder. On remand, the district court held the relevant claims invalid as obvious based upon a finding of motivation to combine the teachings of prior art. On appeal, the court affirmed, holding that there was no clear error in the district court's factual determinations concerning the motivation to combine the prior art and the merit of the holder's asserted secondary considerations. Section 103 required consideration of the claimed invention as a whole and a showing of motivation to make the new combination. The district court did not utilize hindsight in its obviousness analysis, but properly found a motivation to combine. It also properly discounted the holder's evidence of secondary considerations. The record showed that the holder's commercial success was not due to its unique combination, but to its experience and the

fact that it was the first large screw anchor manufacturer to enter the underpinning market.

**OUTCOME:** The court affirmed the district court's judgment.

**LexisNexis(R) Headnotes**

*Patent Law > Nonobviousness > Elements & Tests > Claimed Invention as a Whole*

*Patent Law > Nonobviousness > Elements & Tests > Ordinary Skill Standard*

*Patent Law > Nonobviousness > Elements & Tests > Prior Art*

[HN1] See 35 U.S.C.S. § 103(a).

*Patent Law > Nonobviousness > Elements & Tests > General Overview*

[HN2] In making the assessment of differences, 35 U.S.C.S. § 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. The "as a whole" instruction in Title 35 prevents evaluation of the invention part by part.

*Patent Law > Claims & Specifications > Enablement Requirement > General Overview*

*Patent Law > Inequitable Conduct > General Overview*

*Patent Law > Nonobviousness > Evidence & Procedure > General Overview*

[HN3] Further assurance of an "as a whole" assessment of an invention under 35 U.S.C.S. § 103 occurs by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements

from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination.

**Civil Procedure > Trials > Bench Trials**  
**Criminal Law & Procedure > Appeals > Standards of Review > Clearly Erroneous Review > General Overview**

**Patent Law > Nonobviousness > Elements & Tests > General Overview**

[HN4] While the ultimate determination of obviousness is a legal conclusion reviewed by an appellate court without deference, that determination always entails various factual findings that an appellate court reviews for clear error following a bench trial. The clear error standard permits reversal only when this court is left with a "definite and firm conviction" that the district court was in error.

**Patent Law > Nonobviousness > Elements & Tests > General Overview**

[HN5] A court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved.

**COUNSEL:** Matthew A. Rosenberg, Blumenfeld, Kaplan & Sandweiss, P.C., of St. Louis, Missouri, argued for plaintiffs-appellees.

John H. Quinn III, Armstrong Teasdale LLP, of St. Louis, Missouri, argued for defendant-appellant. With him on the brief was Andrew B. Mayfield.

**JUDGES:** Before NEWMAN, MICHEL, and RADER, Circuit Judges.

**OPINION BY:** RADER

**OPINION:** [\*1271] RADER, Circuit Judge.

On remand from this court's decision in *Ruiz v. A.B. Chance Company*, 234 F.3d 654 (Fed. Cir. 2000), the United States District Court for the Eastern District of Missouri found defendant-appellant A.B. Chance Company's (Chance) patented underpinning system obvious under 35 U.S.C. § 103. Because the district court made no clear error in its factual determinations concerning the motivation to combine the prior art teachings and the merit [\*1272] of Chance's asserted secondary considerations, this court affirms.

I.

Since about 1970, Chance has manufactured screw anchors, also called helical piers, for use in supporting and stabilizing electrical transmission towers. Screw [\*\*2] anchors are elongated shafts with an earth-boring (screw) tip and a transversely extending load-bearing member. In 1988, Chance extended its expertise in stabilizing slumping structures into the residential and commercial building markets. Chance used screw anchors with a metal bracket to underpin these building foundations. The Chance underpinning method places the screw anchor adjacent to the footing and rotates the screw anchor to bore beneath the footing. When resistance to rotation of the screw anchor reaches a specified point, Chance attaches a metal bracket (designated as 30 in the Figure below) to the slouching foundation to transfer the building load onto the screw anchor. The United States Patent and Trademark Office issued U.S. Patent Nos. 5,139,368 and 5,171,107 to Chance in 1992 covering this screw anchor system. Figure 5 in the '107 patent shows the technology:

GET DRAWING SHEET 1 OF 5

Appellees Richard Ruiz and his company Foundation Anchoring Systems, Inc. (collectively "Ruiz") became distributors for Chance's underpinning system. During the early 1990s, Ruiz also formed various other anchoring companies and marketed systems that competed with the Chance system. [\*\*3] In February 1997, Chance terminated Ruiz's distributorship. Thereafter, Ruiz began marketing an underpinning [\*1273] system with screw anchors and metal brackets. This new system used components from other manufacturers. Ruiz filed suit against Chance in August of that same year alleging various non-patent claims, including discrimination, breach of contract, tortious interference with contract and business relations, and breach of fiduciary duty of good faith and fair dealing. Ruiz also filed for a declaratory judgment that its new underpinning system does not infringe Chance's patents and that the patents are invalid. Chance filed a counterclaim for patent infringement.

The validity question focuses on several prior art references. During the late 1980s, Richard Fuller and Stan Rupiper used screw anchors for underpinning existing structural foundations. Fuller and Rupiper used a concrete haunch, not a metal bracket, to transfer the load of the foundation to the screw anchor (the "Fuller-Rupiper method"). Gregory's U.S. Patent Nos. 4,911,580 and 4,765,777 claim an apparatus and system for underpinning structural foundations using a push pier and a metal bracket. In the Gregory system, the [\*\*4] metal bracket transfers the foundation load to the push pier, which is driven into the ground to supply the necessary foundational support. The push pier relies on soil friction to supply that support. Figure 6 of the '580 patent shows this technology:

[SEE FIG. 6 IN ORIGINAL]

The scope of the claims in this case is not at issue in this appeal, because the parties agree that the claims are infringed or invalidated by the use of a screw anchor in conjunction with a metal bracket to underpin a foundation. Additional information [\*1274] concerning the claims and the other aspects of this case appear in this court's opinion in *Ruiz v. A.B. Chance Co.*, 234 F.3d 654 (Fed. Cir. 2000). Examination of the prior art shows that the Fuller-Rupiper method discloses the screw anchor component of the claims; the Gregory system discloses the metal bracket component in the claims. Thus, this appeal is properly focused on the motivation to combine those teachings, as well as any secondary considerations that might inform the obviousness analysis.

The district court granted summary judgment in favor of Chance on all of Ruiz's non-patent claims in April 1999. On the patent claims, the district court held a Markman hearing to construe the claims and a bench trial to decide the issues of infringement and validity. At the time of trial, the scope of the case had narrowed to focus on claims 1-4 and 6-8 of the '368 patent and claims 1-4 and 6-8 of the '107 patent. After the trial, the district court entered its judgment from the bench that Ruiz's product infringes the patent claims to the tune of \$ 540,000 in damages. Nonetheless, the trial court determined that the claims are invalid under 35 U.S.C. § 103 in light of the Gregory patents and the Fuller-Rupiper method.

This court heard the appeal from that judgment and affirmed every holding of the district court except the finding of obviousness. In *Ruiz*, 234 F.3d at 660, this court remanded the case to the district court for further examination of obviousness. This court issued the following instructions:

On remand, we instruct the district court to make specific Graham findings on: 1) the reason, suggestion, or motivation present in the prior art, in the knowledge of one of skill in the art, or in the problem of foundation settling which clearly and particularly would lead one of ordinary skill in the art to combine screw anchors with metal brackets; 2) the level of ordinary skill in the art; and 3) whether, and to what extent, evidence of secondary consideration, such as commercial success, long felt but unresolved need, failure of others, copying, and unexpected re-

sults, is probative in the obviousness analysis.

*Id.*

The district court invited additional briefing and oral argument on the remand issues. Having reconsidered the evidence of the case, the district court again found the relevant claims invalid as obvious and issued an opinion outlining its factual findings according to this court's instructions. Of particular significance, the district court found the motivation to combine the teachings of the Gregory patents and the Fuller-Rupiper method in the nature of the problem of underpinning foundations itself, explaining:

The Rupiper method and the Gregory patent can be combined in either of two ways to reach the same result as the method covered by the patents in issue here: by replacing the concrete haunch of the Rupiper method with the bracket of the Gregory patent, or by replacing the straight piling of the Gregory patent with the screw anchor of the Rupiper method. The evidence in this case showed that there was reason, suggestion or motivation to make these combinations. . . . The problem is the same: how to underpin an unstable foundation of an existing building.

The district court also discounted Chance's proffered objective evidence of commercial success and skepticism of experts as weak. Specifically, the district court found that the alleged skepticism of Chance's system by Rupiper was merely an acknowledgement that Rupiper's concrete haunch worked better than a metal bracket in seismic areas, such as California. [\*1275] The record indeed does not show that Rupiper doubted that Chance's system would work in general. In addition, the district court attributed Chance's commercial success to its background and experience in screw anchors rather than any inventive features of the screw anchor-metal bracket system as a whole.

Chance now appeals again, arguing that the district court, as it did in its original judgment, employed hindsight to find obviousness. Specifically, this appeal involves two challenges to the district court's obviousness determination: 1) whether the district court clearly erred in finding an implied motivation to combine the

prior art teachings in the nature of the problem of underpinning existing foundations, and 2) whether the district court clearly erred in discounting Chance's evidence of secondary considerations. Jurisdiction over this appeal is proper under 28 U.S.C. § 1295.

## II.

Section 103 of title 35 of the United States Code states:

[HN1]

A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

35 U.S.C. § 103(a)(2000).

[HN2] In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. *Env'tl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction [\*\*9] in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often the very definition of invention.

Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided [HN3] further assurance of an "as a whole" assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before [\*\*10] the invention itself, to make the new

combination. See *In re Rouffet*, 149 F.3d 1350, 1355- 56 (Fed. Cir. 1998).

[HN4] While the ultimate determination of obviousness is a legal conclusion reviewed by this court without deference, that determination always entails various factual findings that this court reviews for clear error following a bench trial. See *Weatherchem Corp. v. J.L. Clark, Inc.*, 163 F.3d 1326, 1332 (Fed. Cir. 1998). The clear error standard permits reversal only when this court is left with a "definite and firm conviction" that the district court was in error. *Amhil Enters. Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996).

[\*1276] This case deals with a challenge to the district court's conclusion on two of the underlying factual determinations in its obviousness analysis. Accordingly, this court will review for clear error the district court's conclusions regarding objective, secondary considerations, see *Pro-Mold v. Great Lakes Plastics*, 75 F.3d 1568, 1572 (Fed. Cir. 1996), and whether a motivation to combine the teachings in the prior art references was shown, see *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1348 (Fed. Cir. 2000). [\*\*11]

The district court in this case presided over a bench trial and reconsidered the evidence on remand. Chance's principal argument is that the district court clearly erred in finding a motivation to combine the teachings in the Gregory patents with the Fuller- Rupiper method. Chance cites this court's precedent that warns district courts about the risk of hindsight reconstruction to find an invention obvious where the invention at issue involves relatively simple technology. See *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001). Accordingly, Chance argues that the district court utilized hindsight to find that a person of ordinary skill would have been motivated to combine the prior art teachings.

To the contrary, the record in this case supports the trial court's findings. While this court indeed warns against employing hindsight, its counsel is just that - a warning. That warning does not provide a rule of law that an express, written motivation to combine must appear in prior art references before a finding of obviousness. Stated differently, this court has consistently stated that [HN5] a court or examiner may find a motivation to combine prior [\*\*12] art references in the nature of the problem to be solved. See *Pro-Mold*, 75 F.3d at 1573; *Display Techs., Inc. v. Paul Flum Ideas, Inc.*, 282 F.3d 1340, 1346-47, 60 Fed. Appx. 787 (Fed. Cir. 2002); *In re Huang*, 100 F.3d 135, 139 n.5 (Fed. Cir. 1996). This form of motivation to combine evidence is particularly relevant with simpler mechanical technologies.

This record shows that the district court did not use hindsight in its obviousness analysis, but properly found

a motivation to combine because the two references address precisely the same problem of underpinning existing structural foundations. Moreover the record supports the district court's factual finding that Fuller's and Rupiper's work showed that screw anchors worked better than straight push piers. In fact, the evidence shows that Rupiper introduced Chance to the use of screw anchors in underpinning building foundations. Chance then added a metal bracket to the screw anchor.

The record also supports the district court's conclusion that artisans knew that a foundation underpinning system requires a means of connecting the foundation to the load-bearing member. The Gregory patents teach the [\*\*13] use of a metal bracket to connect a foundation to a straight pier, and testimony at trial showed that the need for a connecting element was widely known. Thus, the district court could properly conclude on this record, without being clearly in error, that a person of ordinary skill would be led to combine the screw anchor in the Fuller-Rupiper method with the metal bracket in the Gregory system to underpin an existing building foundation.

This record, it is true, does not feature an express written teaching in the art to make this combination. On this record, however, that is not fatal to the district court's obviousness determination. As noted earlier, this court has repeatedly stated that the motivation to combine the teachings in the prior art may "come from [\*1277] the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem." *Pro-Mold*, 75 F.3d at 1573. The district court in this case applied that settled law. The district court, sitting as a finder of fact, weighed the evidence and found that, because the prior art references address the narrow problem of underpinning existing building foundations, a person [\*\*14] seeking to solve that exact same problem would consult the references and apply their teachings together. Thus the district court's conclusion is perfectly legitimate when the evidence supports it, as it does here.

Chance's argument amounts to little more than its own alternative view of the evidence. While the record does contain some evidence against the district court's

finding, such evidence is not overwhelming by any means. In addition, the district court in this case did not simply discount all contrary evidence and bolster a meager amount of evidence to reach a preformed conclusion. In fact, the district court discounted and discredited some testimony that actually supported its ultimate conclusion. For instance, the trial court dismissed the testimony of Robert Jones, a Chance distributor, that he would have made the combination. The district court declined to credit Mr. Jones' testimony because he exhibited far more than an ordinary level of skill in this art. The trial court's careful consideration of Mr. Jones' evidence shows further that it performed a detailed and reasoned analysis of the evidence, rather than a conclusion-oriented discussion that typically accompanies [\*\*15] a hindsight analysis. In short, the record in this case does not approach the evidence necessary to leave this court with a firm conviction that the district court committed clear error in its factual finding of a motivation to combine the Fuller- Rupiper and Gregory teachings.

Finally, the record also supports the district court's discounting of Chance's evidence of secondary considerations. The record supports the trial court's finding that any commercial success was not due to Chance's alleged unique combination, but rather due to Chance's experience with screw anchors combined with being the first large screw anchor manufacturer to enter the underpinning market. The district court did not clearly err in reaching this conclusion, nor in concluding that the evidence of skepticism was weak.

### III.

Based on the above analysis, this court holds that the district court did not clearly err in finding a motivation to combine the prior art references in the nature of the problem at issue. In addition, this court holds that the district court did not clearly err in discounting Chance's evidence of secondary considerations. Accordingly, this court affirms the judgment of the district court. [\*\*16]

### COSTS

Each party shall bear its own costs.

### AFFIRMED